These modalities were compared with respect to sensitivity, specificity, positive and negative predictive values and level of agreement (by Kappa statistics) using CT as the 'gold standard'.

Results DUSS failed to detect a number of endoleaks which were seen on CT and the sensitivity of this test was therefore poor (67%). However, the specificity of DUSS compared more favourably with a value of 91%. Positive predictive values ranged from 33–100% but negative predictive values were more reliable with values of 91–100% at all time points post operatively. There were no type I leaks, or endoleaks requiring intervention which were missed on DUSS. Overall, there was a 'fair' level of agreement between the two imaging modalities using Kappa statistics.

Conclusion Although DUSS is not as sensitive as CT scanning in the detection of endoleak, no leaks requiring intervention were missed on DUSS in this study. DUSS is much cheaper than CT and avoids high doses of radiation. DUSS therefore remains a valuable method of follow up after EVAR and can reduce the need for repeated CT scans.

Fresh Arterial Grafts as Conduits for Vascular Reconstructions in Transplanted Patients

Matia I., Adamec M., Janousek L., Lipar K., Viklicky O.. Eur J Vasc Endovasc Surg 2006;32:549-56.

Objectives To assess the outcome of arterial allografts in patients receiving organ transplantation.

Design From October 1997 to June 2005, we used fresh arterial allografts as vascular conduits in 21 patients for the treatment of claudications (10), abdominal aortic aneurysm (6), complicated renal transplantation (2), acute lower extremity ischemia (2) and gangrene (1). At the time of the vascular procedure, ten of the patients (Group A) had already undergone organ transplantation. The mean follow up period was 32 months for renal and 37 months for heart recipients, respectively. In 11 patients (Group B), the vascular reconstruction was undertaken simultaneously with the renal transplantation. The mean follow up period was 49 months.

Results There was no arterial allograft related deaths. No signs of arterial graft infection or requirement for secondary intervention (angioplasty and/or thrombolysis) were observed during the follow up period.

Conclusions Our experience suggests that it is possible to use fresh arterial allografts in the treatment of arterial occlusive disease or abdominal aortic aneurysm, both in already transplanted patients and simultaneously with organ transplantation, with good results.

High Risk Plaque, High Risk Patient or High Risk Procedure?

Naylor A.R., Golledge J.. Eur J Vasc Endovasc Surg 2006;32:557-60.

SAPPHIRE, a randomised trial of endarterectomy versus angioplasty in 'high-risk' patients, concluded that angioplasty was 'not inferior' to surgery. This has subsequently been translated to mean that angioplasty was 'preferable' or 'advisable' in patients considered high-risk for surgery, with no further discrimination between symptomatic and asymptomatic individuals. Moreover, there have been suggestions that the accepted procedural risks may have to be increased in these patients. In fact, 71% of patients in SAPPHIRE were asymptomatic in whom there was an average 6% 30-day death/stroke rate. At this level of risk, neither surgery nor angioplasty could ever prevent long-term stroke. The concept of identifying high-risk patients is laudable, but they should be high risk for stroke (i.e. symptomatic). There is currently little systematic evidence to include asymptomatic patients within this definition.

Chronic Venous Disease Treated by Ultrasound Guided Foam Sclerotherapy

Smith P. Coleridge. Eur J Vasc Endovasc Surg 2006;32:577-83.

Aim To report the outcome of a series of patients with chronic venous disease due to incompetence of saphenous trunks managed by ultrasound guided foam sclerotherapy (UFS).

Patients and methods A group of 808 patients comprise this series. CEAP clinical class for limbs was C1: 15%, C2: 81%, C3: 0.5%, C4: 2%, C5: 0.2%, C6: 0.4%. UFS using 1% polidocanol (107 limbs), 1% sodium tetradecyl (102 limbs), 3% sodium tetradecyl (900 limbs) was employed to treat incompetent saphenous trunks. In patients with unilateral varices 1 treatment was required in 43% of patients and 2 treatments in 48% of patients to obliterate incompetent saphenous trunks and varices. For bilateral varices 2 treatments were required in 40% of patients and 3 treatments in 46% of cases.

The clinical outcome and patency of treated veins on duplex ultrasonography was assessed at a mean follow-up interval of 11 months.

Results A total of 459 limbs were available for assessment at a follow-up interval of 6 months or greater. The CEAP clinical stage was C0:182 limbs, C1: 241, C2: 22, C3: 0, C4: 11, C5: 2, C6:1. The GSV had remained obliterated in 88% of limbs and the SSV in 82% of limbs. Recurrent venous incompetence following previous surgery was as effectively treated by UFS as primary incompetence.

Conclusions This technique is useful in the management of chronic venous disease as an alternative to surgery.